

REMARKS

Applicant appreciates the Examiner's thorough consideration provided the present application. Claims 1-10 are now present in the application. Claims 1, 3, 5 and 10 have been amended. Claims 1, 5 and 10 are independent. Reconsideration of this application, as amended, is respectfully requested.

OBJECTION TO THE DRAWINGS

The Office Action objects to the drawings and indicates the arrow should be pointing to the demodulator block 2 from the error correction stage block 10 in Fig. 1. However, Applicant respectfully notes that the direction of the arrow in Fig. 1 is correct because the error correction of the signal is implemented in the demodulator 2. Therefore, the demodulator 2 generates error parameters which can be used also for error correction of the original signal fed to the weighting filter 11. That is, the error correction stage 10 uses the correction parameters prepared in the demodulator 2 for the reference filter 13. Thus, the arrow in Fig. 1 should lead from the demodulator 2 to the error correction stage 10.

Accordingly, it is respectfully requested the objection to the drawings be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 1-3, 5-7, 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Applicant's admitted prior art (AAPA) in view of Nishimura. This rejection is respectfully traversed.

Amended independent claim 1 includes a combination of elements and is directed to an arrangement for demodulation and modulation error measurement of a digitally modulated receive signal, with a receive filter, and a following demodulator for error compensation and for determining ideal symbol samples. Further, measuring signals are output from the demodulator, a first measuring signal is filtered in a reference filter and a second measuring signal is filtered using a weighting filtered function, in which the first measuring signal and the second measuring signal are then evaluated in a following evaluation circuit, and wherein the second measuring signal of the demodulator is filtered in a measuring filter and the weighting filter function is formed by cascaded filter functions of the receive filter and the measuring filter. Independent claims 5 and 10 include similar features in a varying scope.

These features are supported at least by Figure 2, which illustrates the receive filter 20 and the measuring filter 22, which is cascaded to form the weighting filter function.

Regarding the feature that the weighting filter function is formed by cascaded filter functions of the receive filter and the measuring filter, the Office Action indicates the weighting filter 11 disclosed in the AAPA is functionally equivalent to the measuring filter recited in the claims.

However, as discussed in AAPA at paragraph [0004], the weighting filter 11 (see Figure 1) is defined via the characteristics of the reference filter $13 = \text{TX filter} * \text{weighting filter 11}$. Therefore, the measuring filter 22 in Figure 2 is not equivalent to the weighting filter 11 in AAPA. In addition, as shown in Figure 1 of AAPA, the signal input to the receive filter 1 is separated and fed to the memory 9 and the error correction stage 10 before being passed to the weighting filter 11.

On the contrary, as shown in Figure 2 of the present invention, the signal input to the receive filter 20 is passed to the demodulator 21 and the reference filter 23 and the measuring filter 22. Therefore, with the arrangement of Figure 2, it is possible that the weighting filter function is formed by cascaded filter functions of the receive filter 20 and the measuring filter 22. Accordingly, the present invention advantageously provides a more simple design because the memory 9 of Figure 1 and the additional error correction stage 10 in Figure 1 are not needed. Nishimura also does not teach or suggest the features claimed.

Accordingly, it is respectfully submitted that independent claims 1, 5 and 10 and each claim depending therefrom are allowable.

Further, it is respectfully submitted that the rejection of claims 4 and 8 under 35 U.S.C. § 103(a) as unpatentable over AAPA in view of Nishimura and Tsuda has also been overcome as claims 4 and 8 are dependent claims and Tsuda also does not teach or suggest the features recited in independent claims 1 and 5 as discussed above.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact David A. Bilodeau, Reg. No. 42,325, at (703) 205-8072 in the Washington, D.C. area.

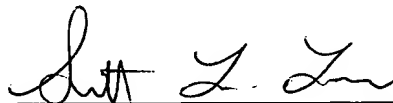
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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